



# Peggy problem

## The story

Aunt Stella looks out of her kitchen window. “Warm and windy . . . looks like the perfect washing day,” she declares as she rolls up her sleeves to wash her clothes.

When she has rubbed them all clean, she carries the heavy, wet pile outside to hang on the washing line to dry. Cosmic and Gem’s friendly faces appear at the garden gate.

“Just in time to help,” Aunt Stella smiles and soon the washing line is filled with brightly coloured T-shirts, socks, skirts and jumpers.

The three of them head into the house for a well deserved glass of apple juice.

“Oh no!” Cosmic shouts with surprise, “Some of the clothes have fallen off the line onto the grass! I don’t think your clothes pegs are grippy enough for the heavy, wet clothes.”

“We’ve got different clothes pegs at home, perhaps they would be better,” suggests Gem, looking thoughtful.

“We could test them for you, Aunt Stella,” they offer eagerly.

Will some clothes pegs be grippier than others?

## What do I do?

1. Follow the instructions on the ACTIVITY CARD. Give the children time to talk when you see this symbol. ►
2. Read the story. Get the children to talk to a buddy about the questions and the ideas in the Concept Cartoon.
3. Talk through the idea of testing the pegs by adding sand to a sock on a washing line.
4. You could let them think of other ways of testing the clothes pegs.
5. Discuss safety issues. See safety notes overleaf for more details.
6. Talk together about what they have found out. Were some pegs better than others? Did everyone get the same result?
7. If painting, encourage them to add as much detail as possible. They could use the winners’ podium to share their results.
8. There are follow up activities for children who have finished or who want to do more at home and earn a bonus sticker.



## ★ Handy hints

### Things to look out for

- ★ Make sure that the children empty the sock as much as they can each time to try to keep the test fair. Otherwise get a collection of socks and use a new one each time. Test the socks to check that the sand does not leak out!

### Resources

- ★ Different types of clothes pegs (use pegs that children have brought in from home if possible)
- ★ Long socks
- ★ Lots of sand
- ★ Small cups for filling the socks
- ★ Dustpan and brush
- ★ Bowls and floor covering to catch the sand

### Background information

- ★ The first pegs were probably sticks with a slit in one end used by fishermen hanging their washing on the rigging while out at sea. It wasn't until the 'spring-clamp' was invented in 1853 that pegs started to resemble those we use today.
- ★ Pegs can be tested in many other ways. For example, measuring the clamping pressure of sprung pegs. You can do this by attaching the pegs to plasticine and measuring the depth of the indentation.
- ★ It is important that the children are able to feel like 'real scientists' during this activity and know that their own ideas are important too. If children do come up with their own tests, try to let them have a go provided you have the equipment and the test is safe.

### Safety

- ★ Put a bowl underneath the washing line for the sand-filled socks to fall into. Be careful where you hang the line so that children cannot run into it. Keep the line low so that the socks do not have too far to fall and the children can reach it easily.
- ★ Children should be careful when handling pegs, particularly those with spring hinges, to avoid getting fingers and skin trapped.
- ★ Children should be reminded not to rub their eyes when they are handling the sand and to wash their hands afterwards.

### How can children share their ideas?

- ★ Draw a picture or poster or use the winners' podium.

